PRACTICE OBSERVED

Practice Research

Appointment systems: feasibility study of a new approach

A T HARRISON

Abstract

Patients in a semirural dispensing practice were asked to determine how much time they required when booking an appointment. A comparison was made between their estimates and the actual time taken.

Patients' estimates proved sufficiently accurate to produce a system that worked well.

Introduction

Appointment systems are used in most practices,¹ and yet, though some observers have found that appointment systems can be efficient and that patients like them,² others have been critical.³ A good appointment system is one that allows the patient to be seen on the day that he wishes and keeps the waiting time for both patient and doctor to a minimum, while allowing adequate time for every consultation.

The nature of a general practitioner's work, however, and the various problems he faces may make working to a rigid structure difficult. It hardly seems logical to allocate 10 minutes for somebody who may be requesting a sick note or five minutes for somebody who may have been recently bereaved, yet the system used by most doctors allows this to happen. Some doctors feel that the pressure of work is such that they cannot allow more than five minutes for each patient, whereas others allocate 10 minutes without seeming to work longer hours. Appointments lasting 10 minutes encourage preventive medicine and allow for more explanation of problems compared with those lasting five minutes.⁴ In addition, both seven and a half and 10 minute appointments have been shown to increase the patient's satisfaction compared with five minute appointments.⁵

Marshall has shown how to reduce waiting time for patients by a simple mathematical model,⁶ but the patient has never been asked to participate in the decision about how long he or she may require with the doctor.

This study assessed how accurately patients could predict how long they would require with the doctor and whether this would produce a feasible system.

Patients and methods

The practice in which the study was based is a semirural training practice with two full time partners and one part time partner. The practice cares for about 5100 patients, with a system of personal lists. The study concentrated on patients seeing only one partner (AH). The 10 minute appointment system was evaluated in the month before the trial system was introduced to allow comparisons. Both studies were conducted when all the partners and the trainee were present.

To evaluate the existing system, 100 consecutive patients were asked four questions: firstly, whether they had been able to obtain an appointment on the day they required; secondly, whether they had been seen at the appointed time and if not how long they had had to wait; thirdly, whether they thought that the doctor had seemed hurried; and, fourthly, whether they liked the present appointment system. In addition, the time at which patients were seen and the duration of the consultation were recorded.

When the trial appointment system was in operation a further 100 consecutive patients were questioned. When they arranged their appointment the receptionist asked them how much time they thought they would need with the doctor. Appointments began at 8 30 am and were booked at a mutually convenient time. If insufficient time was available when the patient wanted to attend they were offered another time during the same surgery. Any patient asking to be seen urgently was seen on the same day. (It had been agreed that the surgery hours would be extended if necessary.) Before the surgery began the doctor was given a list of names of the patients who had made appointments and the order of their appointments.

After the consultation the patient was given a questionnaire similar to that used to evaluate the original appointments system. They were asked whether they had been able to obtain an appointment on the day they wanted, how long they had been kept waiting, how much time they had requested for that consultation, whether the doctor seemed hurried, and whether they liked

East Bridgford, Nottinghamshire

A T HARRISON, MRCP, MRCP, general practitioner trainer

the system. The doctor recorded the duration of the consultation, including the entry in the records and any filling in of forms. Any spare time before the next patient was due to be seen was also noted.

Results

Four of the 100 questionnaires used in the evaluation of the old system and eight of the 100 used in that of the trial system were spoilt. Table I shows the answers to the questionnaires, expressed as percentages of the number of patients answering for each system. The two systems differed little in terms

Comparison of answers to questions and waiting times for patients and doctor under two appointment systems

	Old system (n=96)	Trial system (n=92)
Were you able to obtain an appointment on the day you requested?	Yes=94 (98%)	Yes=90 (98%)
Did the doctor seem hurried?	Yes=6 (6%)	Yes=4 (4%)
Do you like this type of appointment system?	Yes=96 (100%)	Yes=90 (98%)
Average waiting time for patient	6.3 mins	3.1 mins
Average waiting for doctor	0.4 mins	0.7 mins

of how the patients responded to them. The average waiting time for the patients under the trial system was 3.1 minutes, compared with 6.3 minutes under the old system. The average waiting time for the doctor before the next patient arrived was 0.67 minute under the trial system and 0.43 minute under the old system. The average time requested for a consultation was 7.7 minutes, and the average time taken was 8.1 minutes. Five patients asked for 0.4 minutes with the doctor, 36 for 5-8 minutes, 48 for 9-12 minutes, and three for more than 12 minutes. Twenty six patients (28%) were correct to within one minute of the time they had requested, and 48 (52%) were accurate to within five minutes. Two patients were inaccurate by more than 10 minutes (one overestimated and one underestimated). Of the 74 (80%) patients who were right to within five minutes, 41 (56%) overestimated and 32 (44%) underestimated the time that they required. Of the remainder, who were less accurate with their estimates, eight underestimated the time and 11 overestimated.

Discussion

In this study patients proved to be remarkably good at estimating the amount of time that they would need with their doctor, and the

system worked well. Time spent waiting by patients was less than with the conventional system, and although the doctor's waiting time was longer, this would amount to only three or four minutes over a surgery of 15 to 20 patients. The average length of consultations was 8.1 minutes. The reception staff encountered no great problems in implementing the system, and the patients responded positively.

Several factors need to be considered when trying out a new system. Patients in this practice are used to 10 minute appointments, as are the doctors. Patients are not normally aware of the time allocated for their consultations, and the fact that they were asked how long they wanted may have made them more sensitive to the time spent with the doctor. It was important that the doctor did not know how long the patient had requested in case it altered the consultation in any way. Though the content of the consultations in the two systems was not considered, opportunities for preventive medicine and patient education were dealt with according to the doctor's normal practice in both circumstances.

Clearly, most patients requesting three minutes for a rash do not expect to have their blood pressure checked and a discussion about diet and smoking. Equally, we would not expect them to realise that some rashes may require scrapings to be taken and a laboratory request form filled in or a detailed history of potential allergens sought, possibly with a long entry in the patients' records. Nevertheless, the patients in this practice were remarkably accurate at assessing how long the consultation would take.

Though this is a simple study, it may add to the discussion of how we run our practices. Including the patient in the allocation of appointment time should help to promote good relations between doctors and patients without disrupting the efficiency of the practice.

I thank Dr W Holmes for his help in the preparation of the manuscript and Mrs Susan Fletcher for typing.

References

- 1 Drury VWM. Premises and organisation. *Trends in general practice*. London: BMA, 1977.
- 2 Rutledge P. Reviewing an appointment system. *J R Coll Gen Pract* 1977;27:167-8.
- 3 Grieg DNH. *Br Med J* 1984;288:1423-5.
- 4 Morrell DC, Evans ME, Morris RW, Roland MO. The five minute consultation; effect of time constraint on clinical content and patient satisfaction. *Br Med J* 1986;292:870-3.
- 5 Roland MO, Bartholomew J, Courtenay MJF, Morris RW, Morrell DC. The five minute consultation; effect of time constraint on verbal communication. *Br Med J* 1986;292:874-6.
- 6 Marshall EI. Waiting for the doctor. *Br Med J* 1986;292:993-5.

(Accepted 16 March 1987)

100 YEARS AGO

We published lately a letter from a public vaccinator, protesting against the system of inspection of vaccinations, and the manner in which these inspections have been conducted. It will be seen that these two grounds of objection have nothing in common, and we propose to deal with the latter first. The medical inspectors of the Local Government Board are all gentlemen who have shown their especial fitness for the duties that are assigned to them. They are expected by the Local Government Board to perform these duties with intelligence, with justice, and with courtesy, and if any one of their number were known to fail in the last quality, it is certain that his conduct would not meet with the approval of the chief of the medical department, whose courtesy to all with whom he is associated is beyond dispute. If there is reason for asserting that one of the inspectors fails in this respect, the proper course is to place the facts before his official chief. With regard to the system of inspection of vaccination, it should be said, in the first instance, that there is no comparison between the performance of an amputation and that of the operation of vaccination. There is this difference; in connection with public vaccination grants are awarded, and it is absolutely necessary that the Board which has to decide upon the amount of public money which shall be granted to any individual must have the means of judging as to the excellence of the work and the merits of this individual. We may, however, go beyond this in justification of inspection, and assert without exaggeration that a great deal of the vaccination of the country is of

an unsatisfactory character. There is still too much tendency to regard vaccination as (we quote from our correspondent) "work which any old woman might be taught to do in a week quite as efficiently as the cleverest medical man." The efforts of the inspectors have been directed to endeavouring to remove this very erroneous impression, and, so far as public vaccination is concerned, their efforts have been attended by marked success. There is often a marked difference between public and private vaccination. Private vaccination is frequently less satisfactory, and we still hear of the operation being performed in a way that is forgetful of the fact that the duration of protection against small-pox is dependent upon the efficiency of the vaccination. Probably this is due to the neglect of proper teaching of the subject. It is perhaps a little remarkable that an operation which saves more lives every year than any other should be so little heard of in our medical schools that a medical man can write in the present time as if it might be performed by unskilled persons. One other point has been touched upon in our columns—the very inadequate remuneration for vaccination. The Vaccination Act of 1867 prescribes the minimum fee which shall be paid by the guardians for each operation. There is no reason why a larger fee should not be demanded and obtained if the profession chose to insist upon proper consideration for their labours. The guardians not unnaturally pay the smallest sum permitted by law, so long as public vaccinators can be found who will do the work for this amount. This is a question for the profession, and must indeed be decided by them. (*British Medical Journal* 1887;iii:1123.)